



**AFRICA**  
**UNIVERSITY**  
*A United Methodist-Related Institution*

***“Investing in Africa’s Future”***

**COLLEGE OF HEALTH, AGRICULTURE & NATURAL SCIENCES**

**NREM 500: RESEARCH METHODS**

**END OF SECOND SEMESTER FINAL EXAMINATIONS**

**APRIL 2023**

**LECTURER: PROF L. DUBE**

**DURATION: 3 HOURS**

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***INSTRUCTIONS***

Do not write your name on the answer sheet

Use Answer Sheets Provided

Begin your answer for Each Question on a New Page

Credit is Given for Neat Presentation

## INSTRUCTIONS TO CANDIDATES

Answer QUESTION 1 and any other three from the remaining questions.

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### Question 1

Read the following case and answer the questions following it.

#### **Transboundary Pests and Diseases – A threat to agricultural production, productivity and competitiveness for SADC farmers**

Unreliable and unharmonized data in the agricultural sector in Southern Africa has always been a setback for policymakers, resulting in considerable delays in planning processes for implementation of well-coordinated regional responses to curb threats that include transboundary pests and diseases such as the Fall Armyworm and foot-and-mouth disease that negatively impact productivity and trade in the region.

As an agribusiness research consultant, you have been commissioned by the Ministry of Lands, Agriculture, Fisheries, Water, Climate and Rural Development to conduct a comprehensive study looking at the various challenges affecting a well-coordinated regional response in curbing the threats posed by transboundary pests and diseases in the SADC region.

Required:

- a) State an appropriate research title for the research. [3]
- b) Formulate the statement of the problem for the study. [4]
- c) “A research problem exists only if some conditions are met”. With reference to the research problem and the statement of the problem you provided above, highlight three salient features of a good statement of the problem. [3]
- d) Formulate three possible research objectives for the proposed study. [6]
- e) Discuss whether a positivist or pragmatist paradigm would provide the best approach for the study and justify the choice of the paradigm. [5]
- f) Develop a conceptual framework for the above problem, clearly indicating the various types of variables. [10]
- g) Identify the target population for your study and briefly describe how you would select the sample for the study. [5]
- h) Give four ethical considerations that you would bear in mind while conducting your research. [4]

**Question 2**

Research may be considered as an *organized, systematic, data based, critical, objective, scientific inquiry or investigation into a specific problem*, undertaken with the purpose of finding answers or solutions to it. What are the five characteristics of scientific research? [20]

**Question 3**

Ethical issues are crucial for the success of any research work. Discuss giving examples how best you can apply ethical principles to achieve a good research work. [20]

**Question 4**

Proposal development is a critical phase of any research process. Discuss any five reasons why the research proposal is important in any research work. [20]

**Question 5**

What are the 5 reasons that may justify the adoption of a probability sampling strategy in a research process? [20]

**End of Examination Paper**